
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

For information, contact:

James F. Carlin, Jr., Commodity Specialist

Telephone: (703) 648-4985, Fax: (703) 648-7757

Elsie Isaac (Domestic data), (703) 648-7950

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

ANTIMONY IN THE THIRD QUARTER 1996

Prices for most forms of antimony remained fairly stable during the third quarter of 1996, as compared with prices in the past several quarters. The New York dealer price for antimony metal, published by *Platt's Metals Week*, was \$1.05 to \$1.25 per pound at the start of the quarter and finished the quarter at \$1.27 to \$1.40 per pound.

The price of high-tint antimony trioxide, published by *American Metal Market*, started the quarter at \$1.75 to \$2.00 per pound and ended the quarter at \$1.60 to \$1.80 per pound.

The price for clean antimony sulfide ore, published by *Metal Bulletin*, started the quarter at \$22.00 to \$23.00 per metric ton unit and remained constant during the quarter. The price for lump antimony sulfide ore (60% antimony content) began the quarter at \$23.50 to \$24.50 per metric ton unit and remained constant throughout the quarter.

Two reports on the Kadamzhai Antimony Works in Kyrgyzstan shed light on developments at this important operation. One report stated that the Kadamzhai Works was started in 1936. It now produces antimony metal in five grades of purity, and five antimony compounds, including antimony trioxide. The Works produces all of the antimony and antimony compounds in the former Soviet Union and ranks as a world leader in production. Antimony and its compounds ranks as one of Kyrgyzstan's most important exports. England, Germany, and Switzerland are the major export destinations. Reportedly, the antimony produced at the Works is unique in that it contains no selenium, making it suitable for many technical applications.¹

Another report announced that the Kyrgyzstan Government approved a working plan to privatize the Kadamzhai Antimony Works. Kadamzhai is a subsidiary of Kyrgyzaltyn, the State mining agency. Reportedly, Kyrgyzaltyn would like to see 51% of the new corporation remain under Government

control. Another part would go to raw materials suppliers in Yakutia (an internal Republic of Russia) and Tajikistan and a final part would be distributed in a privatization voucher program for Kyrgyz citizens. The report declared that Kadamzhai produces 14 different antimony products, with a production capacity of 18,000 tons yearly (8,000 tons are for antimony metal and 10,000 tons for antimony compounds).²

It was announced that one of the world's largest antimony mines would open in Canada in 1997. Roycefield Resources, Gander, Newfoundland, stated that from its Beaver Brook deposit, near Gander, it would process 100,000 tons of antimony ore annually, yielding about 5% of the world's antimony supply. The \$15 million project would produce both concentrates and antimony trioxide for shipment to North America and Europe. The Noranda Noront Grub Line Syndicate had discovered the antimony prospect in 1989, and it was later purchased by Roycefield. Roycefield is developing a hydrometallurgical process that involves leaching the antimony sulfide in an environmentally safe way that would yield elemental sulfur as a byproduct. The antimony would be converted to antimony chloride and then, via solvent extraction and hydrolysis, to antimony trioxide. Roycefield reports that antimony ore reserves of about 70,000 metric tons have been established thus far. Gold has also been found in one zone.³

¹Presented by V. A. Stavinsky, Executive Director of the Kyrgyzstan Mining Association at the Mining Investment and Business Opportunities Meeting Montreal, Canada, May 23-25, 1996.

²Interfax News Agency. Kyrgyzstan Moves to Privatize Kadamzhai Antimony Works. Issue 28, July 5-12, 1996, p. 7.

³Metal Bulletin. Newfoundland Antimony Mine. No. 8388, July 26, 1996, pp. 1-2.

TABLE 1
SALIENT ANTIMONY STATISTICS 1/

(Metric tons, antimony content)

	1995	1996		
		First quarter	Second quarter	Third quarter
Production:				
Primary smelter 2/	23,500 r/	5,600 r/	6,270 r/	6,790
Secondary 3/	NA	NA	NA	NA
Imports for consumption	36,600	11,500	8,460	6,380 4/
Ore and concentrate	4,260	428	176	184 4/
Metal	16,900	6,230	2,930	2,680 4/
Oxide	15,400	4,870	3,330	3,510 4/
Exports:	8,560	1,280	1,180	1,070 4/
Metal, alloys and scrap	1,610	171	98	15 4/
Oxide 5/	6,950	1,100	1,090	1,050 4/
Consumption of primary antimony	14,300	3,220 r/	3,280 r/	3,220
Price: Average cents per pound 6/	227.77	191.27	162.27 r/	123.39
Stocks end of period 7/	10,600 r/	11,700	11,000	10,200

r/ Revised. NA Not available.

1/ Data are rounded to three significant digits, except prices.

2/ Nearly all smelter output is trioxide.

3/ Data under review.

4/ Data for July and August only.

5/ Antimony oxide content is calculated by the U.S. Geological Survey.

6/ New York dealer price for 99.5% to 99.6% metal, c.i.f. U.S. ports.

7/ Producer and consumer stocks.

TABLE 2
INDUSTRY STOCKS OF PRIMARY ANTIMONY IN THE
UNITED STATES AT END OF PERIOD 1/ 2/

(Metric tons, antimony content)

Type of material	1995	1996		
		First quarter	Second quarter	Third quarter
Metal	2,450 r/	W	3,150 r/	2,760
Oxide	4,450 r/	3,890 r/	4,070 r/	4,040
Other 3/	3,680	7,790 r/	3,790	3,360
Total	10,600 r/	11,700	11,000	10,200

r/ Revised. W Withheld to avoid disclosing company proprietary data, included in "Other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Estimated 100% coverage based on reports from respondents who held 96% of the total stocks of antimony at the end of 1995. Quarterly data includes estimates from companies reporting only on an annual basis.

3/ Includes ore and concentrate, sulfide, and residues.

TABLE 3
INDUSTRIAL CONSUMPTION OF PRIMARY ANTIMONY 1/ 2/

(Metric tons, antimony content)

Class of material consumed	1995	1996		
		First quarter	Second quarter	Third quarter
Metal	2,850 r/	675 r/	619 r/	610
Oxide	11,400 r/	2,540 r/	2,660 r/	2,600
Other 3/	106 r/	5	7 r/	5
Total	14,300	3,220 r/	3,290 r/	3,220

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Estimated 100% coverage based on reports from respondents who consumed 84% of the total antimony in 1995. Quarterly data include estimates for companies reporting only on an annual basis.

3/ Includes sulfide and residues.

TABLE 4
INDUSTRIAL CONSUMPTION OF PRIMARY ANTIMONY, BY CLASS OF
MATERIAL PRODUCED 1/ 2/

(Metric tons, antimony content)

Product	1995	1996		
		First quarter	Second quarter	Third quarter
Metal products:				
Antimonial lead	2,230 r/	400	406	406
Other 3/	1,530 r/	327 r/	270 r/	262
Total metal products	3,760 r/	727	676	668
Nonmetal products:				
Ceramics and glass	1,080 r/	240	231 r/	221
Other 4/	1,690 r/	277 r/	264 r/	261
Total nonmetal products	2,770 r/	517 r/	495 r/	482
Flame-retardants:				
Plastics	6,050 r/	1,340	1,460 r/	1,410
Rubber	443 r/	63 e/	63 e/	63 e/
Other 5/	1,300 r/	47	53 r/	66
Total flame retardant	7,790 r/	1,450	1,570	1,540
Total reported	14,300	2,700 r/	2,740	2,690
Grand total	--	3,220 r/	3,280 r/	3,220

e/ Estimated. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Estimated 100% coverage based on reports from respondents who consumed 84% of the total antimony in 1995. Quarterly data includes estimates from companies reporting only on an annual basis.

3/ Includes ammunition, bearing metal and bearings, cable coverings, castings, sheet and pipe and solder.

4/ Includes ammunition primers, pigments, and plastics.

5/ Includes adhesives and textiles.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ANTIMONY, BY COUNTRY 1/

(Metric tons, antimony content)

Country	1995	1996				
		First quarter	Second quarter	July	August	Jan.-Aug.
Ore and concentrate:						
Bolivia	2,050	--	--	--	123	123
Canada	481	124	20	--	--	144
China	1,060	273	125	--	20	418
Kyrgyzstan	228	--	--	--	--	--
Other	432	30	31	31	10	103
Total	4,260	428	176	31	153	788
Metal:						
Bolivia	255	--	100	20	33	153
China	12,100	4,350	2,180	566	1,250	8,350
Hong Kong	841	562	666	242	57	1,530
Kyrgyzstan	1,880	573	365	118	60	1,120
Mexico	1,630	624	231	107	171	1,130
Other	203	117	139	19	35	312
Total	16,900	6,230	3,680	1,070	1,610	12,600
Oxide:						
Belgium	926	169	149	204	72	594
Bolivia	1,720	632	937	207	182	1,960
China	5,630	2,250	1,810	1,280	427	5,770
Mexico	3,080	759	840	153	152	1,900
South Africa	2,640	697	600	491	249	2,040
Other	1,410	358	259	42	53	712
Total	15,400	4,870	4,600	2,380	1,130	13,000
Grand total	36,600	11,500	8,460	3,480	2,900	26,400
Other antimony compounds (gross weight)	74	11	10	4	18	43

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census. Content of oxide is calculated by the U.S. Geological Survey.